



Anyone who's built a cottage on an island knows the logistics are much more difficult (read: time-consuming and expensive) than raising a cottage on the mainland. So, how do you explain the fact that this Georgian Bay beauty went from the first hammer raised to inhabitable, with functional solar power, in just three days?

It's prefab, of course. But this is like no other prefab you've ever seen. Other than the very final touches, the whole cottage was designed, built and finished, well in advance, on an assembly line, far from the windy island where it would end up. The process consisted of creating a series of modules that were completed in every detail, inside and out — right down to paint colours and light switches — at a rate of one completed module every 12 to 24 hours. This astonishing system not only cuts construction time down significantly, but its environmental impact is considerably lower than a comparable custom project. And given that the factory workers building it are working in ideal conditions and at specific specialized tasks, the construction itself is tighter and of higher-quality than the old-fashioned method.

Of course, the process started a lot earlier than that. The architect/design team of Marilyn Lake and Brian Lee of The Ideal Environment had become interested in the idea

PRESTO! INSTANT RETREAT

An environmentally friendly cottage, assembled in three days *By Martha Uniacke Breen*



of prefab cottage construction as a way to streamline some of the more standardized aspects of the process, freeing up capital to concentrate on the custom design that makes a cottage special to its inhabitants.

Ms. Lake and Mr. Lee approached Royal Homes to develop, in effect, a custom/stock hybrid that combines the best of both. "We came to them and said, 'We'll use some of your stock designs and materials' — they have economies of scale that are way beyond anything we could do on our own — but it would be our design and much of it was built to our specs, especially in the finishes, windows, woodwork and so on."

Virtually every detail is worked out in advance — given the speed at which the modules are created once the process begins, there's no time to second-guess the design or linger over design choices. The only parts that are not pre-constructed at the factory are the siding and some of the ceiling finishes, which can be adjusted to accommodate any movement in the modules during transport or final installation.

Ms. Lake and Mr. Lee held a contest on their website with a custom/prefab cottage design as the prize (the winner would have to provide the site and completion costs). The prize went to the Starr family, and the site, on a small island in Georgian Bay that had been in Russell Starr's family for years, couldn't have been better suited to the concept.

But the cottage's unusual mode of construction is only part of what makes it unique. All of the cottage's electricity needs are provided by a slim, 4x20-foot bank of photovoltaic panels on the south-facing roof, Mr. Starr explains that the decision to go solar actually began, ironically enough, after a chat with Ontario Hydro. "We've always been a relatively environmentally conscious family, but the decision to go off-grid was confirmed when we were told the cost of running power out to the island from the mainland," he recalls. "And they wouldn't even give us a date when it would be installed." Research revealed that installing a solar grid would cost only slightly more than the hydro line, and since it would cost nothing to run, the system would pay for itself in less than 10 years. "And we're quite proud of it," he says with a laugh. "It feels good to have it there."

PRESTO! continued on PH11

The ceilings aren't too high, say the owners, who preferred a cozy cottage.

NATIONAL POST
SATURDAY
JUNE 27, 2008



nationalpost.com

Find your home at nationalpost.com/homes

READ

DEFYING ODDS
Lineups at home sites? And you thought there was a recession.
PH6



DO

GET DIRTY
We're rooting for flowers in containers.
PH8



BUY

LAKE OF BAYS
It cost \$7-million to build, but this waterfront oasis can be yours for \$8.9.
PH15



Off the grid and built with little waste

PRESTO!
Continued from PH1

They picked a site on a narrow tongue at one end of the island that offers beautiful views of the water from both the east and west sides, with woods to the south. "One of the most important challenges of building a cottage is to make it fit perfectly into the site," explains Ms. Lake. "Here, it sits on a narrow strip of land with the wind coming mostly from the back of the house; so you need lots of windows, not just for light but for cross-ventilation. Also, in spring and fall, it can be very windy, so it's sited in such a way that it's sheltered from the strongest winds, while being open to the gentle summer breezes."

The couple wanted the cottage to fit naturally into the landscape, mak-

ing the spectacular double view and rugged topography — especially the famed Georgian Bay rock outcroppings — an integral part of the design. Ms. Lake and Mr. Lee answered by choosing, with the homeowners, a palette of soft greens and greys in side and out, and by adding a wrap-around deck facing both views that, where the drop was shallow enough not to pose a hazard, is left open to the landscape. "We wanted to avoid the big dramatic walkouts and so on, especially in a place like Georgian Bay, where it's all about the rocks," explains Ms. Lake. "They're the natural jewellery of the area, so wherever possible, you want to be able to walk right out on to them directly." On the more sheltered south side, there's a classic screened porch, for sheltering from the fierce July sun by day, and relaxing under a panorama of stars

by night, with the water visible from both directions.

The inside has, as Mr. Lee describes it, "a post-and-beam look without the post-and-beam construction waste." Past a mudroom vestibule where kids can shed muddy boots, the central part of the house is taken up by the great room, with a classic wood-strip ceiling and big stone-clad hearth. The ceiling peaks at a height of 13 feet; it's lofty enough, but hardly the two-storey cathedral that's become commonplace in cottages nowadays. "We have found that often with these huge ceilings, people tend to gravitate towards the kitchen," says Mr. Lee. "It looks great, but it can feel barren and exposed, like a hotel lobby. People really feel more comfortable with a more human scale; especially in a cottage, it adds coziness."

Warm natural materials and finishes throughout the main floor maintain a low-key, woody feel suitable to the view beyond the windows. The leather sofas in the great room are soft as butter, and sturdy enough to stand up to scratches and kids, with grace; the custom Windsor chairs in the dining room feature extra pickets in their backs for increased comfort. And the wide-plank flooring is unfinished Ontario hickory. "It's richer-looking than oak, and harder than maple," explains Ms. Lake. "And it's more environmentally sustainable than bamboo, because it's locally grown and processed." Choosing unfinished flooring makes ecological sense as well, since the designers didn't want to introduce heavy solvents and varnishes to the fragile island eco-system. (In fact, this is another argument in favour of modular prefabrication in general, since hazardous materials can be much more safely controlled and

ventilated in a factory setting.) The kids' rooms are on the main floor as well; on the second floor is a private retreat for the Starrs, consisting of master bedroom, ensuite and a study, with their own view from under the slanted eaves of a big dormer.

It may be environmentally friendly, off-grid and built in an innovative, intelligent manner, but for the Starrs, the cottage's greatest rewards are the same reasons we all put up with the traffic, bugs and sometimes uncertain weather of a trip to the cottage. "It's rejuvenating," Ms. Starr says. "You look out at the water, and immediately you become centred again."

National Post



nationalpost.com

For more photos of this prefab cottage, visit nationalpost.com/homes